

### **ABSTRACT**

An organic light-emitting diode (OLED) device produces white light, includes a) an anode; b) a hole-transporting layer disposed over the anode; c) a blue light-emitting layer disposed over the hole-transporting layer; d) an electron-transporting layer disposed over the blue light-emitting layer; e) a cathode disposed over the electron-transporting layer; wherein the hole-transporting layer comprises an entire layer or a partial portion of a layer in contact with the blue light-emitting layer and contains a light-emitting naphthalene compound having a specified formula.